Via facsimile and Mail

Gwen Zervas, Case Manager
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Department of Environmental Protection
401 East State Street
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Re: Transmittal of EPA Comments for the *Work Plan for Delineating and Characterizing Elevated Lead Concentrations in Soil*, L. E. Carpenter, Wharton, New Jersey

In response to your request, the U.S. Environmental Protection Agency (EPA) has reviewed the document listed above, pertaining to the L. E. Carpenter Superfund Site. My comments are as follows:

General Comments

RMT, Inc. has done a fine job of compiling available historical data from a number of sources, to document extensive prior usage of the locality, both as an iron forge and iron mine. As the reference by Bayley identified that local iron was found to be associated with sulfur, then naturally occuring lead sulfides might also be expected to be found on-site. Therefore, the proposed mineralogical evaluation mentioned on pages 3 and 4, to determine the presence and relative contribution of naturally occurring lead is feasible, however, the document does not specify exactly how the comparison of naturally occurring lead to "elevated levels of lead in the site soil samples," will be conducted. The approach should be specified in a follow-up work plan.

As with the work plan EPA previously reviewed addressing the focused feasibility study and free product issues, this document lacks many of the important details which are to be expected in an approveable work plan. As mentioned in my September 12, 2000 letter, EPA guidance on preparing a work plan should be consulted and a new work plan submitted that contains all of the relevant information. This is necessary to ensure both the quality of the data and that all parties involved can be satisfied that the work performed will achieve goals.

Specific Comments

1. Previously collected surface soil samples are not indicated on the cited figure, therefore, it is not clear whether new samples are intended to be co-located with the test pits? If so, some of these points will produce redundant data. How many samples are included in the initial plan? Is there a plan for how far the additional delineation should step out from a contaminated sample? On what basis will it be determined that the delineation is complete? Will two samples be collected at each location as the text seems to imply by referencing "surface and near surface" samples? Are the depths of the samples tied to field observations or to risk assessment needs?

2. The work plan should specify how many subsurface samples are intended in each test pit. At what depth intervals will samples be collected? What will trigger the decision to stop sampling deeper?

3. Some areas where test pits are planned contain floating free product. The work plan should address whether product laden soils will likely be encountered, and if so, how they will be handled? It does not seem appropriate to dump encountered product or contamination back into the test pits. Please specify how and where soils will be stockpiled during excavation. What decontamination procedures will be used? In what order will the test pits be excavated? For areas where pest pits are only to be sampled at deeper horizons, this needs to be clearly indicated and the intended sampling depths should be provided.

4. The maps should show where SPLP samples will be collected. At least three samples from the stockpiles and three from the other areas should be run to determine how results may vary.

5. The work plan should specify how many samples will be collected at each of the background locations. At what specific depths? What is the justification behind the number and depths of samples?

6. Regarding groundwater sampling, it seems prudent to include wells which are likely to have background levels, as well as well which are directly down gradient. The work plan should give a tabulated list of the wells including information on where each is screened and figures showing any historical lead data. Even if this information is found in previous reports, it should be compiled and included so as to provide

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7. The work plan should state what laboratory analytical methods are being proposed for the soils and groundwater samples.

8. Regarding laboratory confirmation samples, the work plan should specify how these samples will be selected so as to ensure that the range of lab samples includes high and low levels of lead.

9. The one paragraph description relating to how a risk assessment will be conducted is not adequate. For example, the sampling plan and overall focused feasibility study may need to be guided by the specific requirements of the lead risk model to be used. As such, EPA has assigned an appropriate member of its risk assessment support staff to review this document. Therefore, please note that additional comments, if any, will be forward directly to your attention as soon as they have been reviewed and tabulated.

10. The work plan should mention what additional remedial options will be considered if a soil or asphalt capping remedy cannot be carried out.

11. Regarding background sampling, the work plan should outline how the sample locations were selected. In addition, it does not seem appropriate to collect samples from areas proximal to the historical mine entrances and call them "background." The work plan should clearly specify that there are two kinds of samples to be taken - 1) samples which represent soils that may have been impacted by mining; and 2) samples which are representative of true background. Both types of sample locations should be clearly identified

Therefore, it is recommended that two samples be collected from the vicinity of the Orchard mine complex.

12. No sampling is indicated to delineate lead levels proximal to the high levels found at GPC-15. Is this an oversight? Please explain.

In conclusion, thank you for the opportunity to review and provide comments on this document. I hope you find them helpful. Please feel free to contact me at (212) 637-4411, to discuss this matter further.

Yours truly,

Stephen Cipot, Remedial Project Manager
Southern New Jersey Remediation Section

cc: Carole Petersen, Chief
MaryAnne Rosa, Chief
Andy Crossland, PSB

bcc: Stephen Cipot, SNJRS

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